

Questions and Answers About Folate

What is folate?

Also commonly called folic acid, it is a B vitamin which is needed for normal cell growth and healthy blood.

Why is folate especially important for women?

Folate is important before and during early pregnancy because it may reduce the risk of neural tube defects (NTDs) 50-70%.

What are neural tube defects?

The neural tube becomes the baby's brain and spinal cord. It forms during the first few weeks of pregnancy. If the spine does not close properly, it is called **spina bifida**, or "open spine". If the skull does not close properly, it is called **encephalocele**. Another condition, called **anencephaly**, results when the brain and skull do not form properly.

What causes neural tube defects?

Researchers are not exactly sure what causes many NTDs. However, inadequate nutrition, poverty, diabetes, obesity, and use of anti-seizure drugs have been linked to NTDs. Drug and alcohol use have also been linked to NTDs. Genetics and environmental conditions account for many NTD cases.

How are neural tube defects treated?

With spina bifida, surgery is often needed to protect the spinal cord. A commonly associated condition, hydrocephalus (water on the brain), can be relieved by draining off excess fluid. Encephalocele is also treated surgically. Anencephaly is usually fatal. It often leads to miscarriage, otherwise babies are stillborn or die shortly after birth.

What disabilities are caused by neural tube defects?

Spina bifida can cause paralysis and difficulties with bowel and bladder control. Learning problems may also occur. Hydrocephalus may lead to mental retardation or even death. Encephalocele is often associated with severe mental retardation, hearing and vision problems.

What are the chances of having a baby with a neural tube defect?

According to The Centers for Disease Control, there are about 4,000 pregnancies a year, or 2,500 live births, affected by NTDs in the United States. If a woman already has a child with an NTD, the chances of it happening again are much higher. According to the Spina Bifida Association of America, there are more children permanently disabled by spina bifida than by muscular dystrophy, multiple sclerosis and cystic fibrosis *combined*.

Can neural tube defects be diagnosed during pregnancy?

There are several tests available. An alpha-fetoprotein test is conducted around 16 weeks to detect whether or not the spine and skull have closed properly. Amniocentesis and ultrasound tests can also be performed.

Who is at risk for having a baby with a neural tube defect?

Any woman of childbearing age. Research has shown that Hispanic women have the highest rate of affected births, followed by Caucasian women. African American women and Asian women have lower rates of affected births. Although the chances increase if a woman has already had an affected birth, 95% of NTD cases occur in women who have not had a previously affected birth. Any woman who does not get enough folate is at higher risk.

When do I need folate?

Folate is always needed, especially during rapid growth. For pregnancy, the critical period starts one month *before* pregnancy begins and continues through at least the first month. Since most women do not even know they are pregnant in these first few weeks, it is important to get enough folate every day.

How much folate do I need?

The U.S. Public Health Service recommends that women consume 400 micrograms of folic acid daily. The average American woman only consumes about half of this amount daily.

How can I achieve this recommendation?

A variety of foods contain folate, including orange juice, fortified breakfast cereals, dry beans and peas, dark green and leafy vegetables, liver and certain other fruits and vegetables. Grain products labeled “enriched”, including breads, rolls, flours, corn grits and corn meals, farina, rice and pasta are also good sources.

Can I take a vitamin supplement to make sure I get enough folate?

Vitamins work well for some people, and are recommended for pregnant and breastfeeding women. The folic acid in vitamins is easier than food sources for our bodies to absorb and use, but many of us forget to take them regularly. Foods with folate provide additional health benefits because they contain fiber, other nutrients, and are low in calories.

Are there any health risks associated with folate?

Folate is safe, but the Food and Drug Administration recommends limiting total daily intake to less than 1,000 micrograms of folic acid. Sometimes higher levels will be prescribed for women with a history of NTD-affected pregnancies when they are planning another pregnancy. A consistent, very high intake of folate can disguise the signs of vitamin B12 deficiency, which is more common among the elderly. Vitamin B12 deficiency can cause problems with the blood and sometimes permanent nerve damage. A healthy diet combined with a multivitamin containing 400 micrograms of folic acid is well within the safe range.

Are there any other health benefits associated with folate?

Folate may play a role in preventing heart disease. Folate not only helps protect the health of any future children you may have, but is something you can do now to help protect yourself later in life.